

What is Claimed is:

1. A safety catch mechanism for nail guns, comprising:
a main body, having a trigger disposed on a handle of
said main body, a muzzle disposed at the front end of
5 said main body, and a magazine interconnectably /
disposed under said muzzle; wherein a through hole
being disposed on an upper wall of said magazine and
an axle section protruded from a sidewall of said
magazine;
10 a rotary rod, movably disposed on said axle section
and having a push arm extended from the front end of
said rotary rod, an embedding plate bent from the
front end of said push arm, an embedding groove
disposed on said embedding plate, a blocking arm
15 bent and extended from the rear end of said rotary rod
in the direction towards said trigger, a blocking plate
bent from the rear end of said blocking arm and
extended to the rear of said trigger;
a limit plate, movably passing into said through hole
20 of said magazine, and one side of said limit plate
being movably embedded into said embedding groove
of said rotary rod; wherein said limit plate forming a
latch protruded from an inner wall of said magazine;
by means of foregoing components, when said
25 magazine no longer having nails therein, said

- blocking plate blocking the rear of said trigger to prevent a firing pin to shoot a nail; when said magazine being loaded with nails, said latch being pushed outward to drive said rotary rod to rotate, such that said blocking plate being separated from the rear of said trigger and allowing users to cock said trigger.
- 5
2. The safety catch mechanism for nail guns of claim 1, wherein said rotary rod comprises an axial section and an axial hole disposed at the middle of said axial section.
- 10
3. The safety catch mechanism for nail guns of claim 2, wherein said axle section comprises a transversal groove thereon for accommodating said axial section of said rotary rod.
- 15
4. The safety catch mechanism for nail guns of claim 3, wherein said axle section uses a screw rod to pass through said axial hole of said rotary rod, and the axis of said rotary rod is fixed in said transversal groove.
- 20
5. The safety catch mechanism for nail guns of claim 1, wherein said rotary rod comprises a spring bracket thereon, and a spring is embedded into a sidewall of said magazine for providing a resilient force to said rotary rod.
- 25

6. The safety catch mechanism for nail guns of claim 1, wherein said rotary rod comprises a press arm thereon, and a press button is defined by being bent from an end of said press arm.

5